## ARMY SUBSTANCE ABUSE PROGRAM (ASAP)

# Civilian Employee Prevention and Training Part Four





 The "Rave" scene began as a subculture in England circa 1980, and has since migrated into mainstream culture throughout the United States.

#### Rave Culture In The US

- All-night Dance or Party
- 2 Types of Raves
  - Secretive: warehouses, deserts, woods, etc.
  - Commercialized: typically held in established clubs

#### Rave Culture In The US

- Extremely loud "Techno" music/dancing
- Lighting and visual stimuli: lasers, video screens, etc...
- 14-25 age group
- Alcohol-free environment
- Escapist culture
- Club drugs: bought, sold, consumed

- Light Sticks These are used to enhance the visual experience while on the drugs (individuals see "trails" of light)
- Water Bottles & Fans Used to prevent dehydration and increased body temperatures associated with raves
- Pacifiers Rave drugs tend to cause the user to grind their teeth, the pacifier prevents this.



- Eye-drop bottles These are used to store the liquid form of certain drugs.
- Dust masks/Vicks Vapo-Rub These are combined to enhance the effects of the designer drugs.
   The Vicks is placed under the nose, the mask is used to keep the rub from dissipating.

Caffeinated Beverages/Stimulants These help with exhaustion caused
by the dancing and stimulant effect
of the drugs.

 Bags of Small Candies and Breath Mints -- The drugs intended for sale are often stored in these bags.

 The BOMB INHALER - combines eucalyptus, menthol, and other ingredients to awaken your senses and enhance an all natural feeling of easier breathing

 Other - Anything with bright flashing lights or erratic movements (belly light, flashing watches, etc)

#### THE CLUB DRUGS

- Ecstasy
- LSD
- Ketamine
- GHB
- Rohypnol
- Xanax
- Methamphetamine
- PCP

#### **ECSTASY (MDMA)**

(3,4-Methylenedioxymethamphetamine)

- Street names: "E", "X", XTC, Rolling, Clarity, Essence, Adam, Go, Disco Biscuit, Crystal, Hug Drug, Love Drug, Dennis the Menace, Lover's Speed
- Typical Use: In its purest form Ecstasy is a crystalline powder, but is most often pressed into tablets.
  - Typically taken orally in tablet form
  - May be Snorted, Smoked, or Injected



99 Ecstasy (MDMA) Tablets Image © 2000 Erowid.org



I44 Ecstasy (MDMA) Tablets photographer unknown

## SIDE EFFECTS REPORTED BY MDMA USERS

- Anorexia
- Altered Sleep
- Fatigue
- Sadness, midweek blues
- Memory Impairment
- Lack of Attention and Concentration

## PHYSIOLOGICAL EFFECTS WHILE UNDER THE INFLUENCE OF MDMA

- Dehydration
- Exhaustion
- Hyperthermia (106 –107°F)
- Seizures
- Increased Heart Rate
- Kidney Failure
- High Blood Pressure
- Heart Failure

## SHORT TERM EFFECTS OF MDMA USE

- Depression
- Increased release of some hormones such as prolactin and cortisol
- Anxiety
- Insomnia
- Hostility and Aggression
- Flashbacks
- Memory Impairment

## LONG-TERM EFFECTS OF MDMA USE

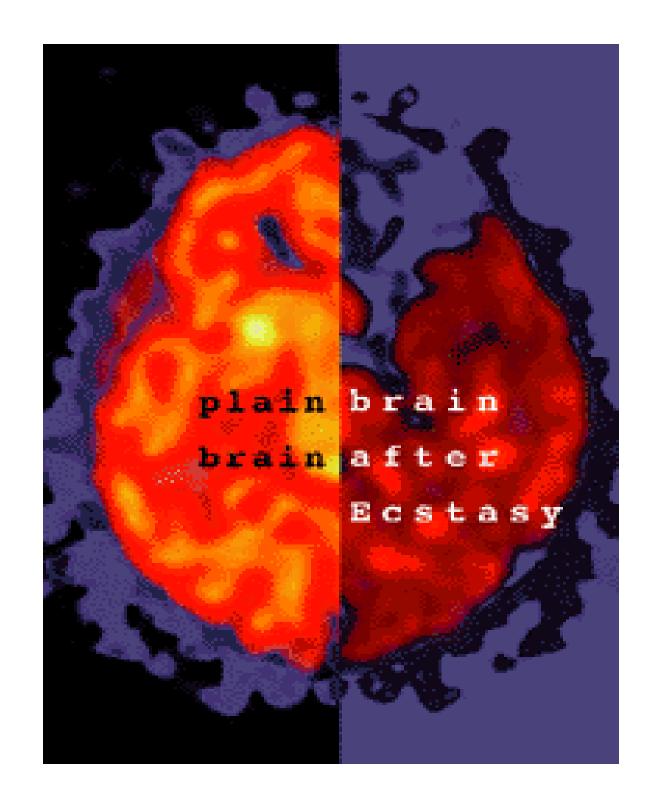
- Depression, Anxiety, & Altered sleep
- Loss of sex drive
- Impulsivity such as obsessive compulsive disorder
- Impaired working memory and recall performance

Note: Scientific research indicates that psychological problems associated with regular MDMA use are not reversible by prolonged abstinence

#### **BRAIN EFFECTS OF MDMA**

#### MDMA (Ecstacy)

- The neurotransmitter, serotonin, modulates mood, emotion, sleep and appetite
- MDMA causes a mass release of serotonin leading to the euphoric effect of the drug
- MDMA results in the depletion of the body's supply of serotonin, often resulting in irreparable damage to the brain
- The depletion of serotonin and the body's inability to replenish it causes depression
- Depression may last over a year in some people



#### MDMA TESTING

 MDMA is detectable in urine for 2-4 days after ingestion.

#### LSD

### LSD is known by hundreds of street names, some of the more universal are:



Hits



Cid



Tabs



**Microdots** 



Trips



Acid



Sid



Blotter

#### HISTORY of LSD

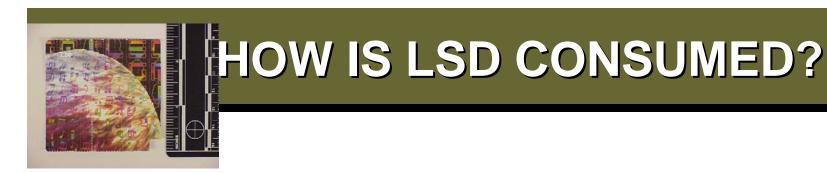
- 1938 While researching blood stimulants, Albert Hofmann synthesizes LSD for the first time.
- 1943 Albert Hofmann accidentally consumes LSD, the first time LSD is consumed by a human. Two days later Albert Hofmann becomes the first person to intentionally consume LSD as well.
- 1949 LSD enters the United States, and is studied in Boston and Los Angeles.



#### HISTORY OF LSD (cont)

- 1951 CIA becomes aware of LSD and begins experimenting with it.
- 1952 The first study is published about treating depression with LSD.
- 1953 Dr. Humphrey
  Osmond begins to use
  LSD to treat alcoholics.
- 1962 FDA restricts LSD research, first LSD related arrests are made.

- 1963 LSD is found on the streets (liquid on sugar cubes).
- 1966 LSD becomes illegal in California.
- 1967 Federal government bans LSD in the U.S.
- 1970 LSD is placed in Schedule 1 of the Controlled Substance Act.



LSD is generally taken orally, either as a pill, a piece of blotter paper (as seen on right), or via liquid dripped onto a sugar cube. LSD can also be absorbed through the users skin.



#### PHYSICAL EFFECTS

- »Dilated Pupils
- »Increased Body Temperature
- »Increased Heart Rate
- »Increased Blood
  Pressure
- »Extreme Sweating
- »Loss of Appetite

- »Sleeplessness
- »Dry Mouth
- »Tremors
- »Nausea
- »Loss of Motor Skills
- »Loss of Coordination
- »Seizures

#### **PSYCHOLOGICAL EFFECTS**

Shortly after the physical effects set in, dramatic psychological effects begin to occur. The majority of these effects are due to severe changes to the users perception, thought, and mood:

- » Vivid Pseudo-hallucinations
- » Loss of depth perception
- » Sensation of floating
- » Sensation of being pressed down
- » Loss of thought process control, i.e. a long lost memory resurfacing.

- » Fusion of the senses (seeing music or hearing colors)
- » Feelings of fear, depression, or anxiety known as "BAD TRIPS"
- » Distorted perception of time
- » True hallucinations

#### PHYSICAL EFFECTS

- »Dilated Pupils
- »Increased Body Temperature
- »Increased Heart Rate
- »Increased Blood Pressure
- »Extreme Sweating
- »Loss of Appetite

- »Sleeplessness
- »Dry Mouth
- »Tremors
- »Nausea
- »Loss of Motor Skills
- »Loss of Coordination
- *»Seizures*

#### LONG TERM EFFECTS OF LSD

### The long-term effects of LSD are known as "FLASHBACKS".

- ➤ Flashbacks are spontaneous, unpredictable recurrences of the LSD experience without the ingestion of more of the drug.
- There are three types of flashbacks:
  - Emotional
  - > Somatic
  - Perceptual

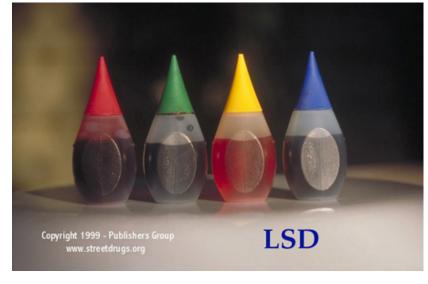
#### **FLASHBACKS**

- Emotional Flashbacks— The most dangerous type, brings back feelings of fear, depression, and anxiety. Reminds the user of a "bad trip".
- Somatic Flashbacks— This type of flashback alters sensations of the body that are associated with the original "trip", i.e. tremors, dizziness and nausea.
- Perceptual Flashbacks— Perceptual flashbacks consist of the sensory distortions that come with the original dose, i.e. seeing music and hearing colors.
- Morning Glory seeds can cause visual and perceptual effects similar to LSD

#### LSD TESTING

LSD is detectable in urine for 1-3 days.









#### KETAMINE



- Ketamine is classified as dissociative anesthetic, or a drug that separates perception from sensation.
- Ketamine, or ketamine hydrochloride, is a Central Nervous System (CNS) Depressant.
- Ketamine is used primarily as an anesthetic in veterinary medicine, but is also sometimes used with small children and the elderly.
- □ Ketamine is found as a clear white liquid or as a white powder.
- Ketamine is considered to be a "club drug".

#### HISTORY of KETAMINE

1962 Ketamine is first synthesized at Parke Davis Labs in California.

1965 Ketamine is determined to be a useful anesthetic.

1970s Patients first report unwanted visions, or hallucinations, while under the influence of Ketamine.



#### HISTORY of KETAMINE



1980s Ketamine is popularized by the publication of two books that provide personal accounts of its use.

1995 DEA adds Ketamine to its "emerging drugs list".

August 1999 Ketamine becomes a Schedule III drug.

#### STREET NAMES

#### Ketalar

#### New Ecstasy







**KitKat** 

Super K

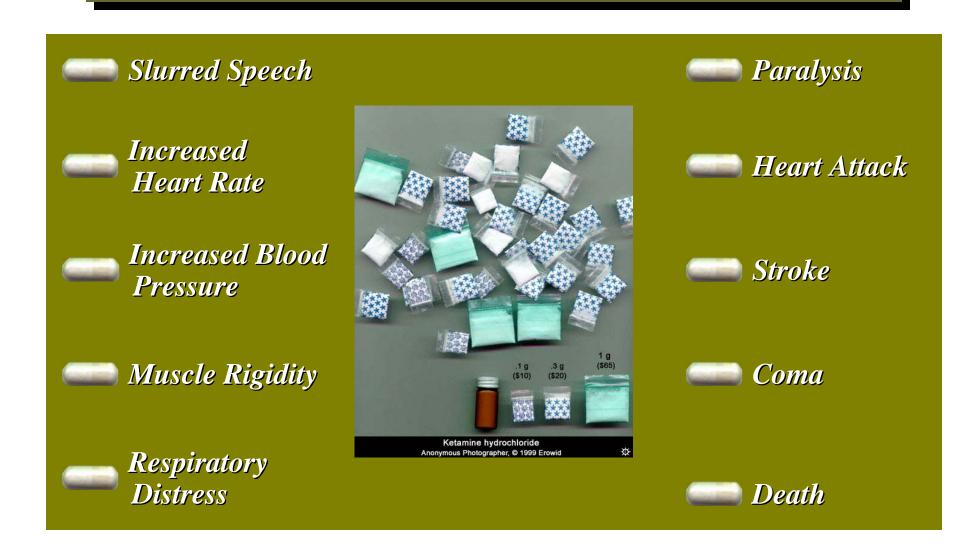


## HOW IS KETAMINE CONSUMED?



- ¥ Injected
- ¥ Snorted
- ¥ Smoked Either with tobacco or marijuana
- ¥ Drank usually diluted with water and/or orange juice
- ¥ Orally Ketamine has been known to come in a pill form that is often sold as Ecstasy.

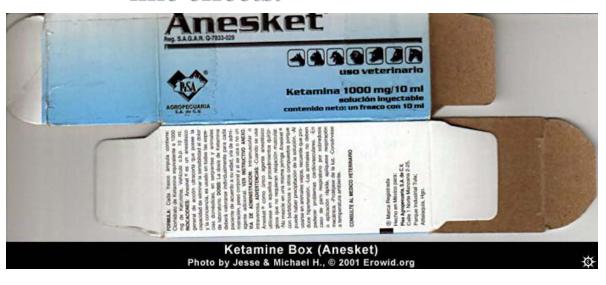
#### PHYSICAL SIDE EFFECTS



#### PHYSIOLOGICAL EFFECTS

- ∠ Amnesia
- Chronic Depression
- Recurrent Flashbacks
- High Blood Pressure
- ✓ Impaired Motor Function
- Loss of senses, time and identity

- "<u>K-Hole</u>" Slang for the neardeath or out-of-body experience that Ketamine causes.
- "<u>K-Land</u>" Slang for PCP-like effects.



#### KETAMINE TESTING

 Ketamine is detectable in urine for approximately 1-2 days.





#### GHB



- □ GHB, or Gamma Hydroxylbuteric acid, is classified as a central nervous system (CNS) depressant that sometimes causes hallucinations.
- □ GHB is usually found as a clear liquid with a slightly salty taste, but can also be found as a small tablet or capsule, all of which dissolve quickly in liquid.
- □ GHB usually is sold by capful or teaspoon, also known as a "dose".

#### HISTORY of GHB

1960s GHB is developed as an anesthetic, but the side effects limit the use.

1980s GHB can be bought in health food stores and use begins to rise amongst body builders due to the myth that GHB has many of the same properties as steroids.

1990 The over-the-counter sale of GHB is banned in the United States by the FDA.



#### HISTORY of GHB



1997-1999 Several countries pass laws to control GHB and several individual U.S. States place GHB in Schedules I through IV.
2000 GHB becomes a

2000 GHB becomes a Schedule I drug in the United States.



# HOW IS GHB CONSUMED?



- ¥ GHB can be found in both a liquid and a powder form.
- ¥ Both forms are consumed orally and are sometimes mixed with sweet or strong flavored drinks to help hide the salty taste.
- ¥ Both forms dissolve almost entirely in liquids.
- You will be a second of the effects of GHB occur approximately 1 hour after ingestion, and can be felt for up to 6 hours.



#### LOW DOSAGE EFFECTS



Low doses are considered to be recreational doses by those that use, or 1-2 capfuls. The low doses of GHB can cause:

- Hypnotic Consciousness
- Mood elevation

Relaxation

• Mild dizziness

- Reduced inhibitions
- Increased Sociability

Decreased Motor Skills

#### HIGH DOSAGE EFFECTS

High doses of GHB are considered to be 3-4 capfuls or teaspoons. The effects of high doses of GHB have been compared to those of heavy drinking:

- ✓ Increased Sociability
- Mild Euphoria
- Slurred Speech
- Nausea



**Grogginess** 

Vertigo

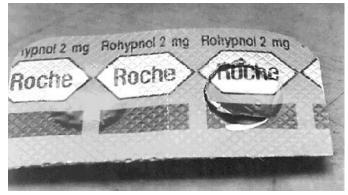
Visual disturbances /
 Difficulty Focusing
 Eyes

#### GHB TESTING

- GHB is detectable in urine for approximately 24 hours after initial consumption.
- GHB is detectable in blood for approximately 4 hours after initial consumption.

- □ Rohypnol (chemical name fluritzrazepam) is a sedative that is more than ten times as strong as Valium.
- Rohypnol belongs to the benzodiazepines family, which also includes drugs such as Valium, Librium, and Xanax.
- □ Rohypnol is known as a "<u>Date Rape Drug</u>" due to its association with sexual assaults.

Rohypnol is produced and marketed by Roche Pharmaceuticals Inc., a Swiss based Health Care Company.



Rohypnol is available as a small, white tablet in 1 mg, or 2 mg doses with Roche inscribed into the pill.

The consumption, possession and/or distribution of Rohypnol in the United States is illegal as it is a Schedule IV drug.

Because Rohypnol is odorless, colorless, and tasteless when dissolved in alcoholic/non-alcoholic beverages, LaRoche has begun to add additional properties to the pill. These properties within the pill:

- Cause light colored drinks to turn blue.
- Dissolve slowly and form small chunks in dark colored beverages.



Rohypnol tablets are white and are single- or cross-scored on one side with "ROCHE" and "1" or "2" encircled on the other.

## STREET NAMES

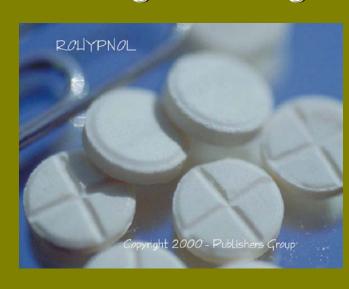
#### **X Forget Me Drug**

**X Circles** 

**X** Roche

**\*** Rope

**\*** Roaches



**\*** Roofies

**ℋ R-2** 

**\*** Rophies

**ℋ Rib** 

**H Mexican Valium** 

#### HOW IS ROHYPNOL CONSUMED?

- Rohypnol is almost always ingested orally in either the pill form or dissolved in a beverage.
- Rohypnol, in its powder form, can also be snorted.
- The effects of Rohypnol can be felt 15-30 minutes after ingestion.
- The effects of the drug can be felt for up to 35 hours after ingestion.

## **EFFECTS**

- **→** Disinhibition
- **+** Slurred Speech
- **→** Muscle Relaxation
- **→** Aggressive Behavior
- **→ Fearlessness**
- **→** Disorientation
- + Amnesia



Though typically white in color, flunitrazepam pills recently seized in Egypt were of a brownish-pink tint, indicating a counterfeit product.

- **→** Impaired Judgement
- **+** Respiratory Distress
- **→ Loss of Motor Skills**
- **→** Blackouts (can last 8-24 hours)
- **→ Dizziness/Nausea**
- **+** Overdose
- **♦** Death

- ⋉ Rohypnol is sometimes used as an "alcohol extender" in combination with beer and other alcoholic beverages.
- Existence Long time Rohypnol users may develop a tolerance for the drug, which could lead to physical dependence and severe withdrawal symptoms.

#### **TESTING FOR ROHYPNOL**

- Rohpynol is detectable in urine for approximately 2-4 days after ingestion.
- A division of Hoffman-LaRoche has developed a special program to assist medical and law enforcement personnel to test for the presence of Rohypnol in the blood and urine specimen from rape victims.

#### **XANAX**

- Xanax is a Prescription oral anti-anxiety agent from the benzodiazepine family.
   Others in the benzodiazepine family include Klonopin, Valium, Restoril, Ativan.
   Prescribed as tranquilizers, sedatives, and pre-anesthetic agents.
- Dispensed in .25mg and 50mg pills, or 1.0,
   2.0 and 3.0mg tablets known as "bar pills".
- Effects are intensified when taken with alcoholic beverages, or with narcotic pain relievers such as Vicodin or Percocet.
- A new "in" drug that is usually swallowed, or crushed and snorted.

#### **XANAX**

- Xannie: Slang term for Xanax that originated in Utah.
- Xanbar: A Xanax pill in 1.0, 2.0 or 3.0mg doses used to treat anxiety. Also known as "bar pill" or "blue footballs".
- Xandy Bar: Xanax + Candy = Xandy Bar
- Xanclets: Cramming Xanax into chiclets.
- Can cause memory loss especially when taken with alcohol or other drugs.
- The use of xanax is very addictive.

### **XANAX**



## METHAMPHETAMINE

- Methamphetamine is a powerful, synthetic Central Nervous System (CNS) Stimulant.
- Methamphetamine is legally prescribed as a treatment for Attention Deficit Disorder (ADD) under the brand name Desoxyn.
- □ The majority of methamphetamine being consumed illegally is manufactured in clandestine laboratories around the United States.
- □ Methamphetamine is classified by the DEA as a Schedule II Controlled Substance.

## HISTORY of METHAMPHETAMINE

1919 Methamphetamine is first synthesized in Japan by A. Ogata.

1940s Japan becomes the first country to suffer a methamphetamine epidemic with methamphetamine being used by factory workers to increase output.

WWII Methamphetamine was used by Japanese, German, British, and American soldiers to help keep them awake during battles and bombing runs.

# HISTORY of METHAMPHETAMINE

1959 The FDA bans the use of most amphetamines, from use in inhalers because of the addictive properties but allows methamphetamine to be used.

1960s Methamphetamine use begins to rise in the United States.

1970 Methamphetamine use is at an alarming rate in California.

The motorcycle gang "Hell's Angels" is responsible for the distribution and production of most of the methamphetamine

being consumed.



## HISTORY of METHAMPHETAMINE

- 1970 Amphetamines become illegal after the passage of "United States Drug Abuse Regulation and Control Act of 1970"
- 1996 The "Comprehensive Methamphetamine Control Act" is passed, establishing new reporting requirements for those companies selling methamphetamine supplies by mail.
- 2000 Senior officials in the Clinton Administration declare Methamphetamine "the worst drug ever to hit America".
- Present Methamphetamine has been associated with "Raves", and belongs to the "Club Drugs" family.

## **METH LAB**

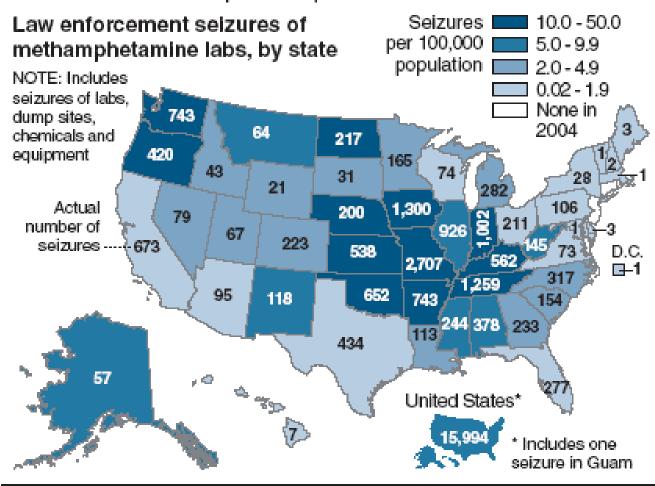


## **HAZMAT TEAM**



#### Meth's affliction felt in nation's heartland

In 2004, authorities made nearly 16,000 seizures related to clandestine methamphetamine labs, many of which were in the Midwest. The meth epidemic affects both cities and rural areas, where meth "cookers" have more space to operate undetected.



#### PHYSICAL EFFECTS

- Methamphetamine can be made with a horrid mix of substances, including over-the-counter cold medicine, such as sudafed, fertilizer, battery acid and hydrogen peroxide.
- The growing use of methamphetamine throughout the country is creating a prominent scar on an increasing number of users - rotting, brittle teeth (meth-mouth) that seem to crumble from their mouths.

### PHYSICAL EFFECTS

- Together, the chemicals reduce a user's saliva, which neutralizes acids and physically clears food from the teeth.
   "When the saliva isn't flowing, the bacteria build up a lot faster."
- Meth users also may neglect their teeth, or moisten their dry mouths with highsugar drinks, and anxiety caused by the drug prompts them to grind their teeth, which speeds decay.
- The problem is particularly noticeable among inmates, whose oral problems have some prison systems struggling to provide dental care.

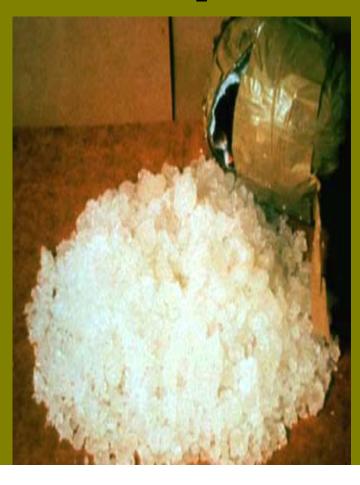
## **METH MOUTH**



## STREET NAMES

- Crank
- Meth
- Speed
- Booger
- Crypto
- Crystal

Ups



- Glass
- Chalk
- Whacked
- Caca
- Crystal Meth
- Tubby Toast

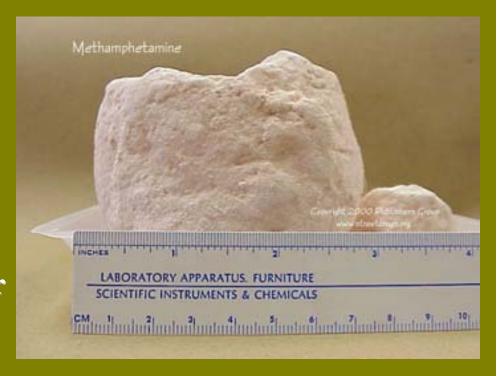
# HOW IS METHAMPHETAMINE CONSUMED?

Methamphetamine is generally a white or off-white powder that can be ingested several different ways:

- \* Orally In a pill form
- \* Snorted This can cause severe damage to the interior and exterior of the nose.
- \* Intravenously The methamphetamine can be injected into either the blood stream or the muscle tissue
- \* Smoked Methamphetamine is sometimes smoked by itself or on top of marijuana.

### SHORT TERM SIDE EFFECTS

- **□** Chronic Depression
- ☐ Anxiety/Panic Attacks
- ☐ Violent/Suicidal Behavior



#### LONG TERM SIDE EFFECTS

Methamphetamine use can cause serious long term side effects that can affect the user for the rest of their life:

- **⋄** Fatal Kidney Disorders
- **⋄** Fatal Lung Disorders
- Severe Brain Damage
- **⋄** Immune System Damage
- Severe Psychological Problems
- **Birth Defects**

- Stroke
- Death



## **METH BURNS**



## **METH BURNS**



#### **ADDICTION**

Physical Dependence - When the users body cannot function properly without ingestion of the drug.

Psychological Dependence - When the consumption of the drug takes priority over other activities within the users daily life.

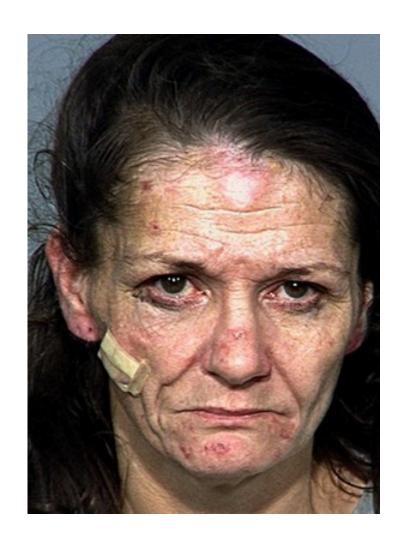
#### WITHDRAWAL

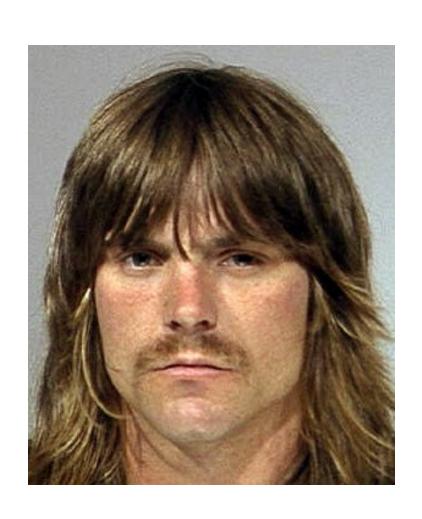
When a dependent person stops ingesting methamphetamines their body must readjust to functioning with the drug.

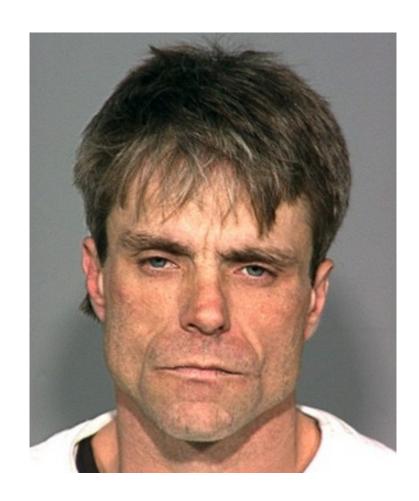
Symptoms of withdrawal can include:

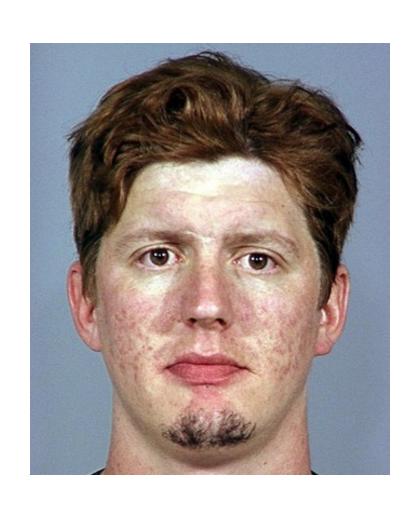
Hunger	☐ Restless Sleep
<b>Extreme Fatigue</b>	☐ Severe Nightmares
☐ Anxiety/Irritability	☐ Severe Distress
☐ Chronic Depression	☐ Panic Attacks







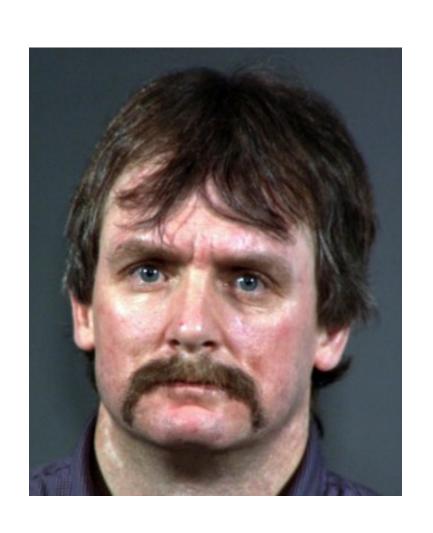


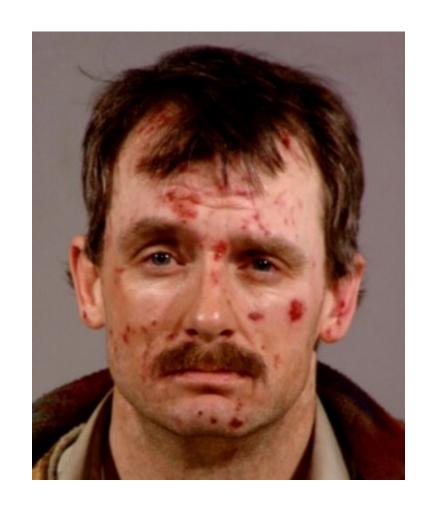




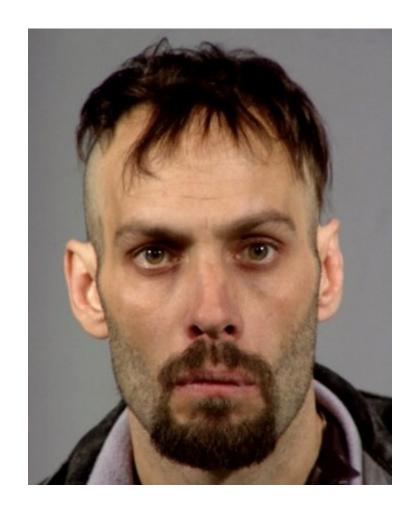












#### YABA

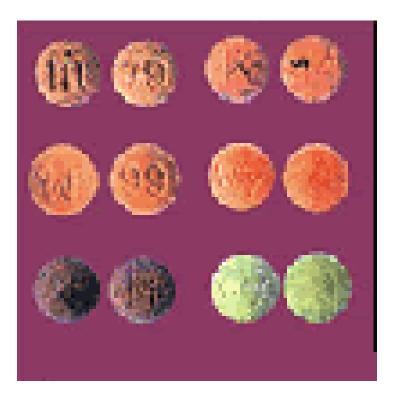
- Yaba is a methamphetamine-based drug originating from Thailand with alarmingly dangerous properties.
- Thai for "crazy medicine," Yaba pills are very small in size (about the size of a pencil eraser). Yaba tablets are sometimes flavored (grape, orange, and vanilla).
- They are a mixture of methamphetamine and caffeine. Tasting like candy, the tablets are marketed to a young audience, particularily at rave's.
- Also known as "Nazi speed" because of its creation by German scientists during World War II to increase the endurance of their soldiers.

#### YABA

- The new form is taken orally and comes in the form of a tablet small enough to fit in the end of a drinking straw.
- Yaba is extremely addictive and can cause elevated blood pressure and body temperature, irregular heartbeat, hallucinations, stroke and death.
- The central nervous system (CNS) actions that result from taking even small amounts include increased wakefulness, increased physical activity, decreased appetite, increased respiration, hypothermia, and euphoria.
- Other CNS effects include irritability, insomnia, confusion, tremors, convulsions, anxiety, paranoia, and aggressiveness.
- Hypothermia and convulsions can result in death.

#### YABA

Street Names
 Crazy Medicine
 Nazi Speed
 Hitler's Drug



# METHAMPHETAMINE TESTING

 Methamphetamine is detectable in urine for 2-4 days after ingestion.

# Young People and Club Drugs: A Dangerous Combination

Lonely 18 year old kids away from home

Underage access to Rave clubs/parties due to lack of alcohol

Attraction to the "club drugs" through peer pressure

Steady incomes and the open sale of drugs

Knowledge of the detection deficiencies for club drugs

Belief that club drugs are not dangerous

# Congratulations! You have completed the training

Fill in the Certificate of Training on the next slide and provide a copy to your supervisor for your training record



### ARMY SUBSTANCE ABUSE PROGRAM EMPLOYEE PREVENTION & TRAINING



#### CERTIFICATE OF TRAINING

PRESENTED TO

Command, Activity or Organization, Location

Date